AR10

RIO ALGOM

MINES LIMITED ANNUAL REPORT 1971

File

Rio Algom
Rio Tinto

Digitized by the Internet Archive
in 2023 with funding from
University of Alberta Library

https://archive.org/details/RioA0508_1971

Rio Algom Mines Limited

120 Adelaide Street West
Toronto 1, Canada

Officers

Sir Val Duncan	Chairman
R. D. Armstrong	President
G. R. Albino	Executive Vice-President
A. F. Lowell	Vice-President, Minerals Marketing
H. A. Pakrul	Vice-President, Controller
J. A. Sadler	Vice-President, Exploration
A. C. Turner	Vice-President, Secretary
J. Van Netten	Vice-President, Treasurer

Directors

G. R. Albino	Toronto	Executive Vice-President of the Company
W. A. Arbuckle	Montreal	President, Arbuckle, Govett & Co. Ltd.
*R. D. Armstrong	Toronto	President of the Company
*Henry Borden, CMG, QC	Toronto	One of Her Majesty's Counsel
J. Ian Crookston	Toronto	President, Nesbitt, Thomson and Company, Limited
*Sir Val Duncan, OBE	London, England	Chairman of the Company and Chairman, The Rio Tinto-Zinc Corporation Limited
J. G. Edison, QC	Toronto	Partner, Edison, Aird and Berlis
*Sam Harris	New York, U.S.A.	Partner, Fried, Frank, Harris, Shriver and Jacobson
L. A. Lapointe, QC	Montreal	President, Miron Company Ltd.
*B. R. MacKenzie, QC	Toronto	Partner, Fasken & Calvin
Leo Model	New York, U.S.A.	Chairman and Chief Executive, Model, Roland & Co., Inc.
W. D. Mulholland	Montreal	President and Chief Executive Officer of Brinco Limited and of Churchill Falls (Labrador) Corporation Limited
F. A. Petito	New York, U.S.A.	Partner, Morgan Stanley & Co.
*J. Herbert Smith	Toronto	Chairman and Chief Executive Officer of Canadian General Electric Company Limited
Sir Mark Turner	London, England	Deputy Chairman, The Rio Tinto-Zinc Corporation Limited
*R. W. Wright, CBE	London, England	Deputy Chairman, The Rio Tinto-Zinc Corporation Limited

*Member of the Executive Committee

Annual and General Meeting

The Company will hold an Annual and General Meeting on Friday, April 21, 1972 at 10:00 a.m. Eastern Standard Time, in the Sheraton Room, King Edward Hotel, 37 King Street East, Toronto, Ontario, Canada.

Directors' Report

TO THE SHAREHOLDERS:

The year 1971 was a difficult one for Rio Algom because of a lower level of world economic activity together with the adverse effects of international currency problems and lower copper prices.

These conditions are reflected in the earnings for the year. They had a particularly detrimental effect on the Company's stainless and specialty steel business and to a somewhat lesser extent on copper operations. On the other hand earnings from uranium operations continued at a satisfactory level. The Company's activities during 1971 are reviewed in detail in the main section of this report.

Development and construction of the Lornex copper-molybdenum mine, which began in August 1970, was maintained on schedule and the mine is expected to be brought into production as planned in the second quarter of 1972. Late in the year a five year contract was concluded for the sale of the projected annual output of molybdenum concentrates.

As previously reported the entire copper concentrate production of the Lornex mine has been contracted for by a group of Japanese smelters and trading companies for a period of 12 years. The Japanese copper smelting industry is currently depressed and the industry has stated that its costs have increased as a result of pollution control requirements and the revaluation of the Japanese yen. Consequently the Japanese purchasers have indicated that they may request Lornex to reduce its shipments temporarily and to grant an increase in the contracted smelting and refining charges applicable to the Lornex concentrates.

The Lisbon uranium mine, located near Moab, Utah, on which development began in 1969, is also expected to be brought into production in the second quarter of 1972. The economic reserves of the Anglo-Rouyn copper mine near La Ronge, Saskatchewan, in which the Company has a 58% interest, are approaching exhaustion and the mine is now scheduled to close in the third quarter of 1972. It is planned that the Poirier copper mine in north-eastern Quebec will operate throughout 1972 at the increased milling rate of 1,800 tons of ore per day that was achieved in mid 1971.

The position taken by the Government of Canada regarding foreign ownership in the Canadian uranium industry has caused the company to virtually discontinue uranium exploration in Canada. With respect to other metals and minerals and to activities in the United States, the search for new ore bodies that can be developed in an orderly and profitable manner was increased in scope and scale in 1971 from the already expanded activities of the past several years.

Although the current uranium market is weak, the longer term market outlook is considered to be very strong. Firm contracts for delivery of 50,753,000 pounds of uranium oxide from the Elliot Lake and Lisbon mines assure continuity of uranium operations into the early 1980s on the basis or current contracts. Letters of intent have been signed for the sale of an additional 1,000,000 pounds of uranium oxide for delivery in the 1972-1974 period.

The price of copper continued to decline and in 1971 reached its lowest level in recent years. Because of the diverse and complex factors which affect the price of copper it is hazardous to predict future price levels. However, the recent modest firming of the copper market indicates that it is reasonable to expect a slightly higher average price in 1972 than in 1971.

The steel operation is expected to be affected adversely by severely depressed market conditions through the first quarter of 1972. Nevertheless, a modest improvement in earnings is expected to be achieved in 1972 primarily as a result of the concentrated profit improvement program initiated during 1971. Further improvement in earnings from steel operations is, however, dependent on improved market conditions and a return to reasonably competitive trade practices throughout the world.

For the future there are wide areas of uncertain economic and legislative forces that affect the Company's operations. The effects of international currency realignments and trade agreements on Canadian and international economic conditions is not clear. In Canada the new taxation legislation effective January 1, 1972 will, when it becomes fully effective, impose a tax burden on the Canadian mining industry greater than that applicable to the industry in a number of other countries. Legislation has also been proposed by the Government of Canada regarding other business activities, the effect of which cannot be assessed at this time.

Despite all of these uncertainties, however, it is expected that 1972 will be a year of continued progress toward the longer term objective of

broadening Rio Algom's base as a natural resource developer.

Mr. Henry Borden, Q.C. is retiring from the Board of Directors at the Annual and General Meeting of Shareholders to be held on April 21, 1972. He has served as a Director since 1961 and as a member of the Executive Committee of the Board since 1965. His fellow directors wish to express their appreciation to Mr. Borden for his advice and counsel to the Company during this period.

The untimely passing of Mr. W. P. Arnold, a Director and Executive Vice-President, Mining Operations, on January 3, 1972, is a sad loss to his colleagues and to the Company. In 1957 he was appointed Managing Director of Algom Uranium Mines Limited and Northspan Uranium Mines Limited, two of the four companies amalgamated in 1960 to form Rio Algom. He held a number of progressively more responsible positions with the Company, was elected a Director in 1967 and, in 1968, was elected Executive Vice-President, Mining Operations. As a Director and Officer Mr. Arnold made most valuable contributions to Rio Algom, notably in the development of the Elliot Lake area uranium mines, the Poirier and Anglo-Rouyn copper mines and in the development of the Lisbon uranium mine in Utah.

Mr. O. S. Leslie retired as a Director and as Executive Vice-President, Steel Operations, in August 1971. He joined the steel operation in 1966 as General Manager of Steel Operations, was elected a Director in 1967 and was elected Executive Vice-President, Steel Operations in 1968. Mr. Leslie's resignation was accepted with regret and his contribution to the progress of the steel operations of the Company is acknowledged with gratitude.

You will be asked at the Annual and General Meeting to authorize a decrease in the Board of Directors from eighteen members to fifteen.

Your Directors extend their appreciation to the management and employees of Rio Algom and its associated companies for their loyal and valuable efforts in furtherance of the Company's objectives during a difficult year.

On behalf of the Board,

Toronto, Canada
February 25, 1972.

R. D. Armstrong
President.

Highlights of the Year's Consolidated Operations

YEAR ENDED DECEMBER 31, 1971
($000's omitted)

	1971	1970
Sales	$ 168,029	*$ 183,525*
Net earnings	$ 9,698	*$ 14,076*
Per share of common stock	$ .73	*$ 1.08*
Dividends paid on common stock	$ 4,900	*$ 4,900*
Per share	40¢	*40¢*
Working capital, year end	$ 65,170	*$ 76,080*
Ratio of current assets to current liabilities	2.7 to 1	*3.4 to 1*
Common shareholders' equity	$ 165,861	*$ 161,821*
Total common shares outstanding at December 31	12,249,584	*12,249,584*
Equity per share of common stock outstanding	$ 13.54	*$ 13.21*
Production		
Uranium oxide (pounds)	4,492,389	*3,994,987*
Copper in concentrate (pounds)	37,326,192	*35,238,821*
Steel (tons)	139,810	*155,192*
Number of employees at December 31	4,860	*5,198*

Index

Review of 1971 Operations

1 *Uranium production was 3,013,000 pounds in 1971. Photo shows "yellow cake" being packed into steel drum for shipment.*

2 *Longhole drilling is part of the Company's effort to develop mechanized mining of a sloping orebody.*

MINING

1971 earnings from mining operations before income and mining taxes were $13,836,000 compared to $10,205,000 in 1970. Total revenue was $46,857,000 an increase of $2,444,000 compared to the previous year.

Revenue and earnings from uranium operations increased over 1970 because of higher production resulting from a higher milling rate and better average grade. Total revenue and earnings from copper operations were lower than in the previous year as a result of lower copper prices although payable copper production increased by 2,100,000 pounds despite the closure of the Pronto copper mine in April 1970.

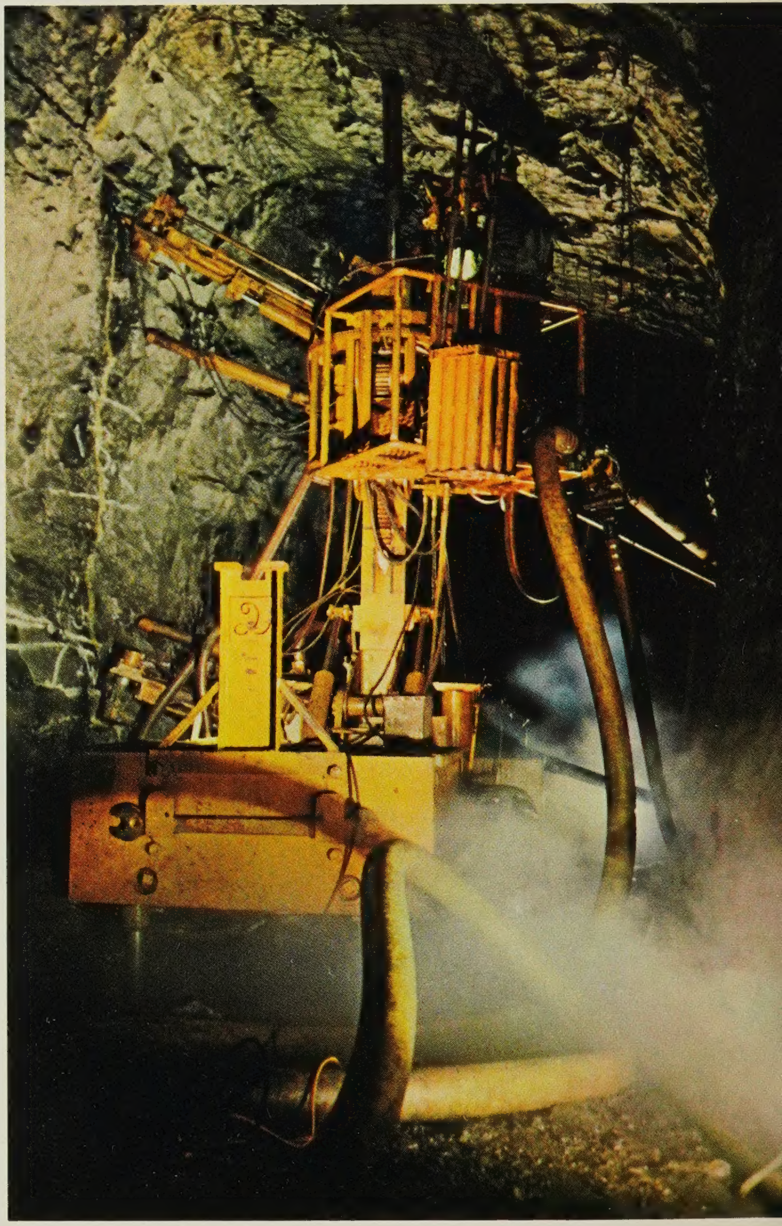
URANIUM

Comparative production and deliveries of uranium oxide from the Elliot Lake mines in 1971 and 1970 were as follows:

	1971	1970
Tons of Ore milled (thousands)	1,564	1,443
Average tons milled per day	4,587	4,231
Average Recovered Grade per ton	2.9 lbs.	2.8 lbs.
Average Mill Recovery	95.0%	94.4%
Pounds of Uranium Oxide produced (thousands)	4,492	3,995
Pounds of Uranium Oxide delivered (thousands)	3,013	3,520

The increase in average grade reflects the mining of progressively greater tonnages of ore from the higher grade New Quirke mine. The Old Quirke mine was closed at the end of 1971 and when useable equipment and materials are brought to the surface the mine will be allowed to flood. The New Quirke mine and the mill have proven production capability of maintaining an average milling rate in excess of 4,500 tons of ore per day. This capability is sufficient to meet deliveries into the mid 1970's under present sales contracts.

1



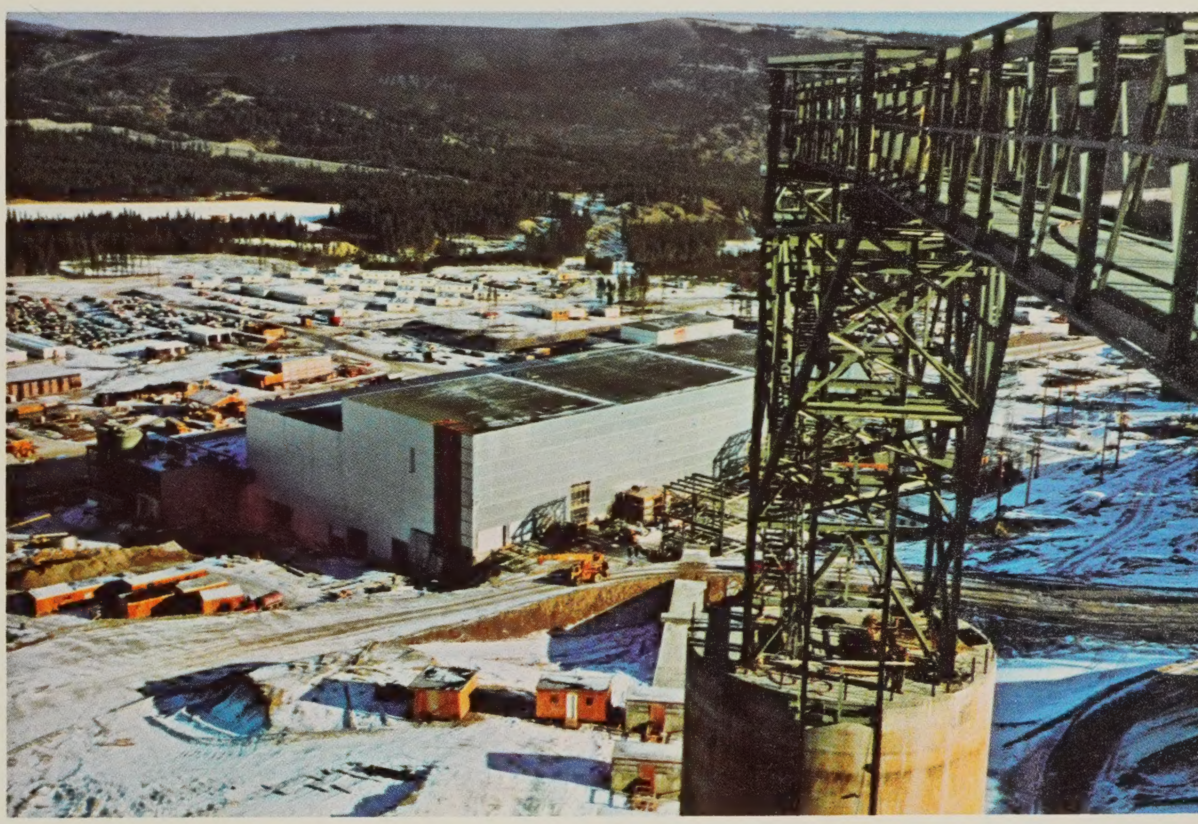
2

COPPER

Comparative production from copper operations in 1971 and 1970 was as follows:

	Total		Mines de Poirier		Anglo-Rouyn	
Copper	1971	1970	1971	1970	1971	1970
Tons of ore milled (thousands)	923	877	614	562	309	315
Average tons milled per day	—	—	1,748	1,663	855	887
Average Mill Head Grade	—	—	2.6 %	2.3%	1.5 %	1.7%
Average Mill Recovery	—	—	94.3 %	94.4%	96.0 %	96.6%
Tons of custom Ore milled (thousands)	239	247	239	247	—	—
Pounds of payable copper in concentrate produced (thousands)*	37,326	35,238	28,834	23,549	8,492	9,770
Other Metals						
Silver Produced (ounces)	83,590	89,676	42,217	39,815	41,373	49,861
Gold Produced (ounces)	11,914	12,592	—	—	11,914	12,592

**1970 includes 1,919,000 pounds produced by the Pronto mine which was closed in April 1970.*



3 *Lornex's mill complex as seen from coarse ore conveyer trestle. The mill is expected to process over 38,000 tons of ore per day.*

4 *Logan Lake, a planned community built by Lornex and incorporated as a village, was opened officially November, 1971. It has a population of more than 500, some 140 homes, townhouses, mobile homes, paved roads, a school, bank, service station, fire department and an RCMP detachment.*

3

4

MINE DEVELOPMENT

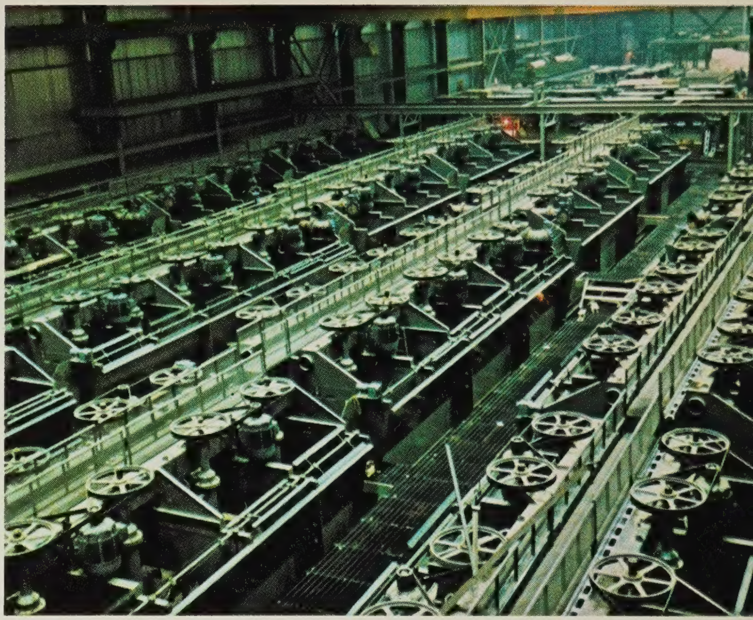
Lornex Project

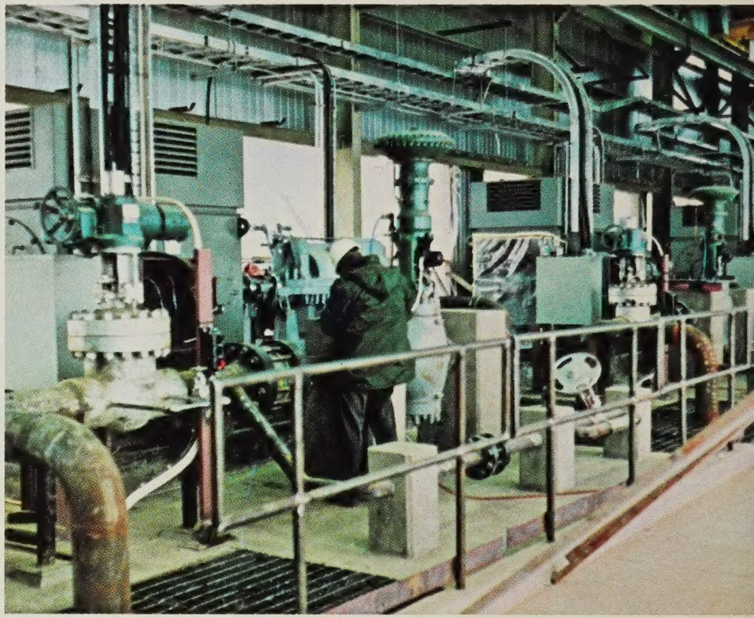
The Lornex Mining Corporation Ltd. copper-molybdenum mine on which development and construction work began in August 1970 is expected to be brought into production in the second quarter of 1972 as planned. Rio Algom owns 50% of the Lornex voting shares and has a beneficial interest of approximately

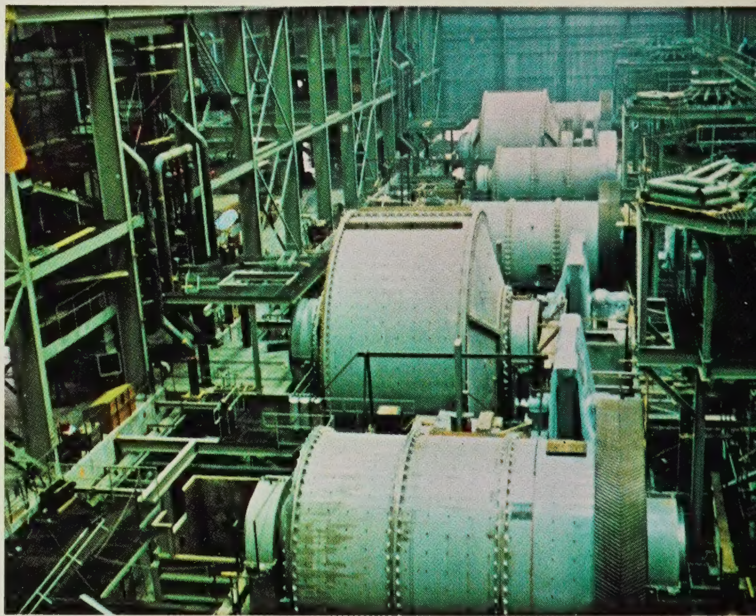
55%. The Company is contractually responsible for the construction of the Lornex Project and for its management during construction and thereafter for a period of at least fifteen years from December 31, 1969.

As previously advised it is expected that the Lornex Project capital cost will be $138.0 million compared with the $123.6 million originally estimated in 1969 when the financing arrangements were made. The increase from the original estimate is mainly due to unprecedented escalation of costs and more stringent pollution control regulations. Other mining companies deferred decisions to develop their contiguous properties and hence their participation in the capital costs of the water and tailings systems. In addition, a number of improvements in physical facilities were made as detailed design evolved that are capacity and operating cost oriented. The increased capital expenditure is expected to result in some increase in actual plant capacity as compared to the design capacity of 38,000 tons of ore per day. Moreover, as pit preparation progressed and additional information became available there were indications that the average grade of copper may be higher than the 0.427 per cent grade used in the economic evaluation. It thus seems probable that production will exceed the design forecast after the operation has been brought into balance.

During the year, in compliance with its supplementary financing agreement, Rio Algom purchased Lornex Units each comprising an Income Debenture of $1,000 and 80 shares of Lornex for $16.1 million.

1


2


3


1 *Flotation concentrator where copper is recovered.*

2 *Booster pump station which provides the operation with water from Thompson River. Some 17 miles of 20 and 24-inch pipeline is required to carry water from the river to the plant.*

3 *Part of grinding bay in which coarse ore is reduced prior to further processing which removes copper concentrate from host rock.*

In accordance with a previous agreement, 27.5% of the Units were sold to The Yukon Consolidated Gold Corporation Limited. Accordingly Rio Algom's net investment in Lornex Units arising from the supplementary financing was $11.7 million in 1971. These transactions and Rio Algom's total investment of $36.1 million in Lornex at December 31, 1971 are described in the financial section of this report.

In view of the importance of the Lornex Project to Rio Algom, with the consent of Lornex and for your further information, the Annual Report of Lornex Mining Corporation Ltd. for the year ended December 31, 1971 is forwarded to you with this report.

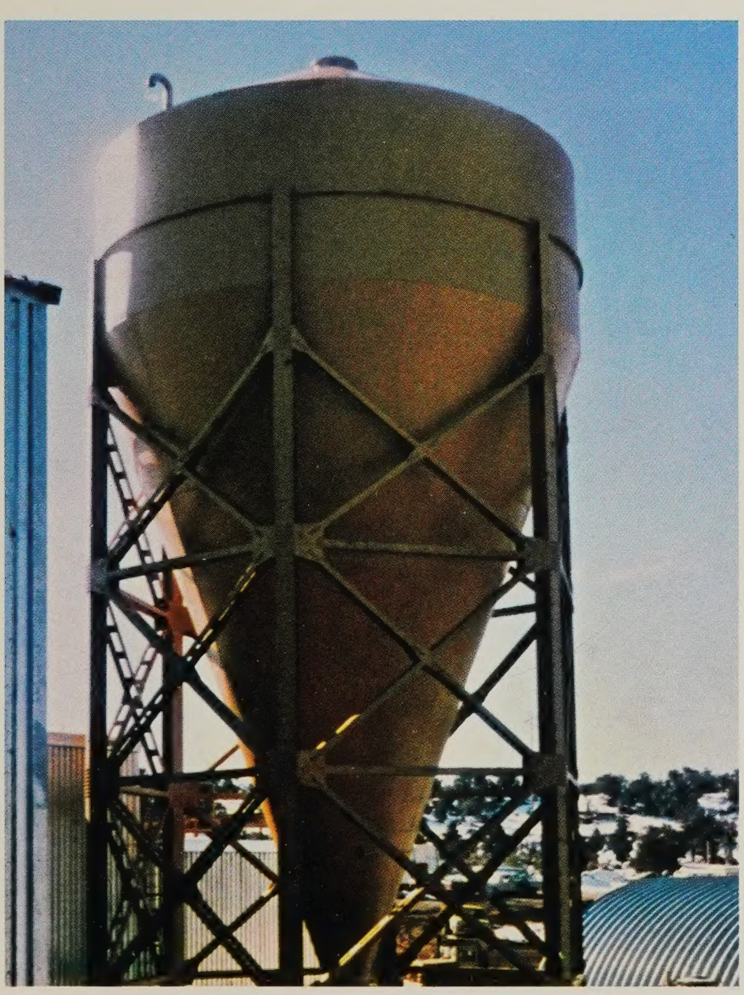
Lisbon Mine

The new uranium mine in Utah being developed by a wholly-owned United States company, Rio Algom Corporation, is expected to be brought into production in the second quarter of 1972 as planned.

4 *Lisbon mine headframe with top mounted friction hoist as seen from the concentrator building.*

5 *Fine ore bin where uranium ore is stored before entering mill for processing.*

4



5

Because of the costs of overcoming the excess flow of water that was encountered in February 1971, the unusual degree of cost escalation which has been experienced and the need to comply with more stringent pollution regulations the total estimated cost to bring the mine into production is now expected to be approximately U.S. $23.3 million compared to the original estimate of approximately U.S. $20.0 million. The additional financial requirements will be provided by increasing the bank loans.

The planned production rate is 1,200,000 pounds of uranium oxide per year. Sales contracts for delivery from this mine total 8,400,000 pounds of uranium oxide with deliveries starting in July 1972 and extending to 1980.

EXPLORATION

Exploration expenditures by Rio Algom and its subsidiaries on their own account and through participation with others was $2,385,000 compared with $2,006,000 in 1970 and $1,621,000 in 1969. The increase reflects the increase in scope and scale of long term exploration programs which have been initiated and are continuing in the search for new orebodies in Canada and the United States.

An active search for uranium prospects was continued in the United States. In Canada, work on uranium properties was limited to those in which an interest was held in March 1970 when the Government of Canada announced its intention to limit foreign ownership in the Canadian uranium industry.

The long term program initiated in 1967 directed primarily at identification of porphyry copper mineralization was continued in British Columbia, Saskatchewan, Ontario and Quebec. Further investigation of these areas will continue.

During the year an asbestos prospect located near Lac Roberge in northwestern Quebec and a coking coal deposit in southeastern British Columbia were under detailed investigation. In the case of both prospects preliminary engineering, market studies

5

Despite the most modern equipment exploration crews can find nature obstinate. In photo 1, even tracked vehicles find it difficult to negotiate the mud of spring breakup. Avalanche (photo 2) is a constant threat in the Rockies. Here a Riocanex bulldozer clears the road after one such slide.

3 *Drilling a coal prospect near Fernie, B.C. The Clark Range provides a magnificent background.*

4 *Seismic survey being carried out on a northern Quebec lake.*

5 *A portable rotary drill probing another property in Western Canada.*

1

2

3

4

and economic evaluations are being continued in 1972.

RESEARCH AND DEVELOPMENT

During 1971 process and method improvements in operations comprised the major effort in research and development work.

Mining method trials during the year confirmed the capability of accurate longhole drilling, which has not previously been used by Rio Algom in the Elliot Lake uranium operations, with special equipment designed for this purpose. Current development work is now providing access to thicker ore and it is expected that savings from mechanization will be realized in 1972.

Tests are in progress to determine the applicability of a hydraulic backfill system to the New Quirke mine. The objective is to permit increased mechanization and to make it economic to recover ore from pillars in the thicker ore zones that are now being developed.

A mine ventilation monitoring system has been developed and a test monitor is in operation at the Quirke mine. This system is expected to reduce the cost and improve the efficiency of the mine ventilation system.

6 *Thousands of feet of pipe carry water to sprinklers watering 84 acres of test plots seeded by Rio Algom at Elliot Lake in 1971. The Company is attempting to revegetate tailings areas that are no longer in use. Photo 7 shows modest success achieved.*

Attention continued to be directed to safeguarding the environment in all areas of mining operations. In co-operation with pollution regulatory authorities the design of all new mine waste disposal areas incorporates the latest technology with regard to the treatment and storage of mine waste. The investigations which began in 1970 to develop a means of revegetating old mine waste disposal areas at Elliot Lake have met with modest success. Further work will be required to solve this difficult problem.

EMPLOYEE RELATIONS

At December 31, 1971 there were 1,466 employees engaged in mining operations of whom 1,112 were engaged in production and 354 engaged in executive, technical, administrative or clerical functions. Employee relations continued to be good and apart from minor occurrences there were no strikes or work stoppages during the year.

Collective agreements with the majority of hourly rated employees at the Elliot Lake uranium mine and the hourly rated employees of the Anglo-Rouyn copper mine are in effect until January 15, 1973 and May 31, 1973, respectively. The collective agreement with the hourly rated employees at the Lornex mine is in effect until June 30, 1972. An agreement with the hourly rated employees of Mines de Poirier copper mine, replacing the agreement which expired on December 22, 1971, was concluded on February 11, 1972 and will be in effect until December 21, 1974.

6

7

STEEL

Earnings from steel operations for the year before income taxes were $1,806,000 as compared with $9,627,000 in 1970, a decrease of $7,821,000. The earnings in each year are stated after the deduction of $1,047,000 representing the annual charge for amortization of the excess of acquisition cost over adjusted book value of the Atlas Steels assets purchased as at December 31, 1962. Total sales, including metal products purchased by warehousing operations for resale, were $121,172,000 or 13% lower than in 1970.

The decline in sales and earnings was caused primarily by the deterioration of markets in terms of both volume and price together with a substantial increase in employment and other costs which could not be offset by improvements in operating efficiencies.

A decline in demand for stainless and specialty steel products in both the domestic and export markets began in the fourth quarter of 1970 and continued throughout 1971. Downward price pressures were caused by excess world productive capacity in relation to the depressed demand for stainless steel products and in many cases, particularly in export markets, prices for stainless steel declined below the levels at which a profit could be realized. Prices for specialty steels generally remained at previous years' levels but volumes declined. The continued float of the Canadian dollar during 1971 at levels which approached parity with the United States dollar caused an additional effective price reduction for Canadian producers in export markets and at the same time increased the attractiveness of the Canadian market to foreign producers who had excess productive capacity.

The foregoing forces which caused deterioration in markets in terms of both volume and price were especially harmful with regard to stainless steel products. Consequently there was a particularly serious adverse effect on the operations of the Tracy plant; the total tonnage of stainless flat rolled products sold and the average price per ton realized were substantially lower than in the previous year.

1

3

A few of the
Atlas Steels product applications:

1 *Over 99 percent of all new homes in Canada are equipped with stainless steel sinks.*
2 *Stainless-bladed fan for air conditioned cars is a new application for the auto industry. The blades flex and flatten at high speeds to reduce drag.*
3 *15-foot wide stainless fermenting tank in Toronto brewery. The brewing and food processing industries are important stainless users.*
4 *Tool steels such as these die cases and inserts of exacting tolerances use Atlas Dievac.*
5 *Stainless steel building cladding is a growing application. Some 2 million pounds of Atlas stainless cover 57-storey Commerce Court in Toronto.*
6 *Towel dispenser of Atlas Ezeform stainless.*

MARKETING AND DISTRIBUTION

Imports of stainless and specialty steels into Canada increased during the year as Japanese, Swedish and other European producers sought to replace sales lost in other markets because of economic conditions and protectionist policies adopted by other countries. These offshore producers sold products into Canada, particularly in the stainless steel categories, at what we consider to be unrealistically low prices. Consequently the sales volumes of several major product lines produced at both the Tracy and Welland plants were severely reduced and prices were depressed to an unrealistically low level. Unlike

a number of other countries, Canada has not entered into agreements which protect Canadian producers of stainless and specialty steels from unfair competition. Representation has been made to the appropriate Federal Government authorities in regard to these conditions.

A decline in Canadian sales volume for a wide range of products generally reflected the lower level of some segments of Canadian economic activity. The volume of automotive end use products was relatively strong. Volume of project type business was lower due to the reduced level of capital expenditure in the pulp and paper, petro-chemical, machinery and nuclear power industries. For a number of major product lines volume has been maintained by reducing prices, on a selective basis, to meet competition from imports.

In the United States severe price competition continued at the mill and distributor levels. The low prices, together with the increased value of the Canadian dollar and the United States surcharge of 10% on imports, reduced our ability to compete and significantly reduced profit margins on sales made in the United States.

Sales volume in the United Kingdom was maintained in the face of strong competition. However, prices were lower reflecting the severe competitive conditions in that market.

In Australia the volume of stainless flat rolled products continued to decline as a result of the prohibitive tariffs introduced on imports in 1970 to protect domestic producers. However, the volume of high speed and stainless wire finished on our production facilities in Australia increased.

Severe competition for available export business in South America and Europe resulted in very low prices and participation in these markets was reduced significantly.

MANUFACTURING

During the year there was continued emphasis and progress made on improvements in manufacturing efficiency, quality improvement and utilization of raw materials. The Tracy plant concentrated primarily on improvement of a number of production techniques, particularly in melting and casting, and gratifying quality improvements were achieved in the

5

6

1

2

latter part of the year. Quality performance at the Welland plant was also improved particularly with regard to reductions in billet scrap, sheet product rejections and the frequency of makeovers.

The long term program, initiated in 1967, to rehabilitate and modernize the Welland plant continued in 1971. More efficient and accurate analysis equipment was placed in operation in the chemical laboratory and provides improved control over the melting operation. A new cold draw bar facility was completed and productivity is improving despite the low level of business. The first phase of the major rehabilitation and re-arrangement of the conditioning operation was completed and the six new high powered billet and slab grinders and the modern billet stocking facilities have resulted in substantial manpower reductions and in the recovery of grinding dust. The completion of a major re-arrangement of the finishing and shipping operation has improved production efficiency and shipping performance.

During the year, in co-operation with pollution regulatory authorities, further plans were developed for facilities which will be required to improve and preserve the quality of air and water at the Welland and Tracy plants. An electrostatic precipitator installed in the exhaust system of the scarfing operation, which removes scale from steel billets, eliminates virtually all the fumes from that unit previously exhausted into the air.

RESEARCH AND DEVELOPMENT

In 1971 research and development programs continued to be directed toward product development, new processes and the reduction of costs and the increase of productivity.

Significant success was achieved in meeting specific market needs with new or improved steels. Predominant in these developments was the introduction of a family of free-machining stainless steels which can be applied to a broad range of end uses. The complete product line, the culmination of several years of development and field testing, was introduced to major customers in a series of seminars at Welland, Toronto and Montreal.

The major product line of mining steels was augmented with the introduction of a new hollow drill grade. Research will continue with the object of matching this product to the latest manufacturing technology employed by mining rod fabricators to achieve superior drilling performance.

Two steel refining processes, both having the capability of significantly reducing the cost of chromium used in manufacturing stainless steels, have undergone extensive review. Detailed engineering studies are under way and it is anticipated that a process for the Tracy plant will be selected early in 1972.

Programs relating to reducing raw material costs are in progress. A program initiated in 1970 resulted in the introduction of a method of recycling steel grindings.

PLANNING

During the year the steel operations management continued its analysis of the options available for the further rehabilitation and modernization of the Welland plant and for potential improvements to the Tracy plant melting operation.

Programs have been initiated to examine product lines for the purpose of re-alignment by both rationalization and expansion to improve profitability. Programs now under way are expected to improve results for some of the tool steel products and for products of the new cold draw facilities.

EMPLOYEE RELATIONS

As of December 31, 1971 there were 3,192 employees engaged in steel operations of whom 1,958 were engaged in production, 578 in sales and marketing and 656 in executive, administrative or clerical functions. Employee relations were good through the year and there were no strikes or work stoppages.

Collective agreements for Welland plant hourly rated employees will be in effect until February 17, 1973. The collective agreements for Tracy plant hourly rated employees and for the office and technical employees are in effect until November 30, 1972 and February 1, 1974 respectively. The collective agreement for Welland office and technical employees expired on December 31, 1971 and a representation vote has been held, the results of which are not yet known.

1 *New conditioning operation at Atlas Steels' Welland plant provides increased efficiency and superior product. Inset shows one of the unit's grinders removing surface imperfections from a billet.*

2 *Before and after start-up of Atlas Steels' $340,000 electrostatic precipitator that eliminates fumes from the Welland plant scarfing operation. Because of the precipitator, the old chimney became unnecessary and was removed.*

FINANCIAL

Consolidated net earnings were $9,698,000 or $0.73 per share in 1971 as compared with $14,076,000 or $1.08 per share in 1970 (after deducting extraordinary items totalling $1,330,000). In both cases the earnings per share are stated after provision for dividends on preference shares.

The decrease in consolidated net earnings resulted from a decrease of $7,821,000 in net earnings from steel operations and an increase in corporate expenses, net interest costs and taxes of $1,518,000 which were partially offset by an increase in earnings from mining operations of $3,631,000 and a decrease of $1,330,000 in extraordinary items. As previously mentioned, the reduction in earnings from steel operations was caused primarily by the deterioration of sales markets in terms of both volume and price while the improvement in earnings from mining operations was mainly due to higher uranium production. Investment and other income was substantially lower, due to the investment of funds in Lornex and lower rates of interest earned on the reduced amount available for investment.

During 1971 dividends of $816,000 on preference shares and $4,900,000 on common shares were paid. Dividends on common shares were paid at the same rate of 40¢ per share as in 1970 and represented 50.5% of consolidated net earnings.

Bank loans increased during the year from $4,430,000 to $13,362,000, primarily in borrowings to finance the construction of the Lisbon uranium mine in Utah which totalled U.S. $11,088,000 at the end of the year. The net excess of assets over liabilities increased to $179,761,000 from $176,079,000. During the year $11,594,000 was expended on capital projects, including U.S. $6,777,000 on the Lisbon mine and $11,702,000 was invested in securities of Lornex Mining Corporation Ltd. During 1971 the remaining net advance payments of $933,000 under the terms of Rio Algom's uranium sales contract with Eldorado Nuclear Limited were repaid.

Auditors' Report

To the Shareholders of Rio Algom Mines Limited:

We have examined the consolidated statement of financial position of Rio Algom Mines Limited as at December 31, 1971 and the consolidated statements of earnings, retained earnings, contributed surplus and source and disposition of funds for the year then ended. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion these consolidated financial statements present fairly the financial position of the companies as at December 31, 1971 and the results of their operations and the source and disposition of their funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Toronto, Canada.
February 22, 1972

COOPERS & LYBRAND
Chartered Accountants

ACCOUNTING POLICIES

The principal accounting policies followed by Rio Algom Mines Limited and its subsidiaries are summarized hereunder to facilitate a comprehensive review of the financial statements contained in this report.

Basis of Consolidation

The consolidated financial statements include the accounts of all significant majority-owned subsidiary companies.

The accounts in foreign currencies are stated in Canadian dollars on the following basis:

Current assets and current liabilities at year-end exchange rates; all other assets and any related depreciation at rates in effect at date of acquisition; and revenues and expenses (other than depreciation) at average rates for the year.

Valuation of Inventories and Concentrates Awaiting Shipment

Inventories of steel, other metals, raw materials and supplies are valued at the lower of cost and market. Cost is determined generally at average or standard costs which approximate actual. Market for steel and other metals is net realizable value and for raw materials and supplies is replacement cost. Intercompany profits have been excluded from these inventories.

Concentrates awaiting shipment are valued at selling price.

Depreciation and Amortization

The following accounting policies are being followed in connection with the depreciation charges of the Company:

(i) Mining fixed assets:

Depreciation is being provided on fixed assets on the basis of the shorter of physical life or economic life, as estimated for the individual mining units, the economic life to be adjusted from time to time as conditions warrant.

(ii) Steel fixed assets:

Fixed assets are being depreciated on the straight line method based on engineering estimates of the lives of the assets at the following rates:

Buildings	4% per annum
Plant and equipment	6⅔% per annum

Mining properties and preproduction expenditures are being amortized on the same basis as depreciation is being provided on mining fixed assets.

Other costs applicable to future periods are being amortized on a straight line basis over a 20 year period which will end in 1982. Discounts realized on purchase for cancellation of debentures have been applied to reduce the unamortized balance of discount and financing expenses.

Development Projects and Exploration

Development projects are carried forward as assets while the projects are considered to be of value to the Company. All exploration expenses have been written off.

Income Taxes

Because the Company did not claim depreciation or mine development expenses during the tax exempt periods of its mines, it has available sufficient of such expenses to eliminate taxable income for the year. The Company does not intend to provide for income taxes so long as the accumulated amount of these expenses claimed for tax purposes is less than the accumulated amount recorded in its accounts.

Full provision has been made for Provincial mining taxes and the income taxes of subsidiary companies.

RIO ALGOM MINES LIMITED

(Incorporated under the laws of Ontario)

Consolidated Statement of Financial Position

DECEMBER 31, 1971
($000's omitted)

	1971	1970
CURRENT ASSETS:		
Cash	$ 2,893	$ 2,353
Short term investments, at cost, and deposits	200	11,016
Marketable securities	—	384
Receivables	30,367	33,760
Due from affiliated and associated companies	1,191	1,579
Inventories and concentrates awaiting shipment (note 2)	67,209	55,880
Prepaid expenses	939	2,179
Total	102,799	107,151
Less:		
CURRENT LIABILITIES:		
Bank loans	13,362	4,430
Accounts payable and accrued liabilities	20,057	23,124
Due to affiliated and associated companies	187	100
Provision for income taxes including Provincial mining taxes	2,422	1,869
Preference share dividend payable January 1	201	207
Long term debt due within one year (note 7)	1,400	1,341
Total	37,629	31,071
WORKING CAPITAL	65,170	76,080
Investment in Lornex Mining Corporation Ltd. (note 3)	36,104	24,402
Plant and equipment, less depreciation (note 4)	77,690	77,496
Mining properties and preproduction expenditures, less amortization (note 5)	22,242	20,604
Other costs applicable to future periods (note 6)	11,895	13,248
TOTAL ASSETS LESS CURRENT LIABILITIES	213,101	211,830
Deduct:		
Long term debt (note 7)	32,000	34,000
Minority shareholders' interests in subsidiary companies	1,340	1,751
	33,340	35,751
EXCESS OF ASSETS OVER LIABILITIES	$179,761	$176,079
OWNERSHIP EVIDENCED BY (note 8):		
Capital stock	$ 86,337	$ 86,695
Contributed surplus	19,581	19,523
Retained earnings	73,843	69,861
Total	$179,761	$176,079

Approved on behalf of the Board:

R. D. ARMSTRONG, Director BRYCE MacKENZIE, Director

Consolidated Statement of Earnings

YEAR ENDED DECEMBER 31, 1971
($000's omitted)

	1971		1970	
REVENUE:				
Revenue from mine production and sales of steel and other products	$168,029		*$183,525*	
Investment and other income	580		*1,519*	
	168,609		*185,044*	
EXPENSES:				
Cost of production, selling, general and administrative expenses	141,878		*154,065*	
Interest and amortization of discount and financing expenses	2,307		*2,167*	
Depreciation and amortization (note 11)	10,809		*9,862*	
Exploration expenditures	2,385		*2,006*	
	157,379		*168,100*	
	11,230		*16,944*	
Provision for income taxes including Provincial mining taxes	1,943		*1,491*	
Earnings before adjustment for minority interests in subsidiary companies ..	9,287		*15,453*	
Minority interests in profits (losses) of subsidiaries	(411)		*47*	
NET EARNINGS FROM OPERATIONS	9,698		*15,406*	
Earnings per common share before extraordinary items		73¢		*$1.19*
Extraordinary items:				
Writedown of marketable securities to net realizable value	—		*658*	
Foreign exchange loss arising from floating of Canadian dollar	—		*672*	
	—		*1,330*	
NET EARNINGS FOR THE YEAR	$ 9,698		*$ 14,076*	
Net earnings per common share		73¢		*$1.08*

Consolidated Statement of Retained Earnings

YEAR ENDED DECEMBER 31, 1971

($000's omitted)

	1971	1970
BALANCE, beginning of year	$ 69,861	$ 60,915
ADD:		
Net earnings for the year	9,698	14,076
Reserve for marketable securities no longer required	—	600
	79,559	75,591
DEDUCT:		
Dividends on preference shares	816	830
Dividends on common shares	4,900	4,900
	5,716	5,730
BALANCE, end of year	$ 73,843	$ 69,861

Consolidated Statement of Contributed Surplus

YEAR ENDED DECEMBER 31, 1971

($000's omitted)

	1971	1970
BALANCE, beginning of year	$ 19,523	$ 19,424
Profit on purchase of preference shares for cancellation	58	99
BALANCE, end of year	$ 19,581	$ 19,523

Consolidated Statement of Source and Disposition of Funds

YEAR ENDED DECEMBER 31, 1971

($000's omitted)

	1971	1970
SOURCE OF FUNDS:		
Net earnings for the year	$ 9,698	$ 14,076
Add charges against earnings for year not involving current outlay of funds:		
Depreciation, amortization and other charges (net)	10,703	10,484
Writedown of marketable securities reserved for in 1967	—	600
	20,401	25,160
DISPOSITION OF FUNDS:		
Expenditures (net) for plant and equipment and preproduction	11,594	11,396
Investment in Lornex Mining Corporation Ltd. (net) (note 3)	11,702	18,540
Dividends on preference shares	816	830
Dividends on common shares	4,900	4,900
Reduction of long term debt	2,000	2,000
Reduction of long term advances	—	933
Purchase of preference shares for cancellation	299	344
	31,311	38,943
DECREASE IN WORKING CAPITAL	$ (10,910)	$ (13,783)

Notes to Consolidated Financial Statements

DECEMBER 31, 1971

1. ACCOUNTING POLICIES

The information on page 15 presents a summary of certain accounting policies and is an integral part of these financial statements.

2. INVENTORIES AND CONCENTRATES AWAITING SHIPMENT

These consist of:	1971	1970
Mining operations —		
Mine supplies	$ 2,484,641	$ 2,535,889
Concentrates awaiting shipment	18,204,706	6,707,425
	20,689,347	9,243,314
Steel operations —		
Steel, other metals, raw materials and supplies	46,519,531	46,636,636
	$67,208,878	$55,879,950

3. INVESTMENT IN LORNEX MINING CORPORATION LTD.

This consists of the following securities of Lornex:

	Par value or Number of Shares 1971	1970
8½% Income Debentures — par value	$32,942,000	$21,240,000
Common shares — 50.0% of Lornex outstanding shares	3,569,292 shs.	3,120,776 shs.
Class A shares — 100% of Lornex outstanding shares	712,018 shs.	224,374 shs.

The quoted market value of the common shares at December 31, 1971 was $28,197,407 (1970 $20,753,000). There is no quoted market value for the Income Debentures or Class A shares and the actual value of the common shares may be more or less than that indicated by market quotations. The Class A shares are non-voting but may be exchanged for common shares at any time.

At December 31, 1971 the Company's accrued interest from Lornex Income Debentures amounted to $3,241,503. This accrued interest cannot be paid by Lornex until after required principal and interest repayments have been made on senior forms of debt. At December 31, 1971 the Company provided an identical allowance of $3,241,503.

4. PLANT AND EQUIPMENT

Plant and equipment consists of:	1971	1970
Buildings, machinery and equipment and construction in progress, at cost	$213,377,528	$207,698,327
Less accumulated depreciation	137,777,061	132,291,964
	75,600,467	75,406,363
Land, at cost	2,089,666	2,089,526
	$ 77,690,133	$ 77,495,889

Plant and equipment includes $72,764,186 in respect of assets of mines presently idle which have been fully depreciated.

5. MINING PROPERTIES AND PREPRODUCTION EXPENDITURES

These consist of:	1971	1970
Mining properties, at cost	$ 7,321,527	$ 7,142,853
Less accumulated amortization	5,895,091	5,870,158
	1,426,436	1,272,695
Preproduction expenditures, at cost less amortization	20,815,450	19,331,483
	$22,241,886	$20,604,178

6. OTHER COSTS APPLICABLE TO FUTURE PERIODS

These include the following:	1971	1970
Discount and financing expenses, at cost less amortization	$ 383,081	$ 688,936
Excess of acquisition cost over adjusted book value of Atlas Steels assets, less amortization	11,511,992	12,559,092
	$11,895,073	$13,248,028

7. LONG TERM DEBT

This consists of:	1971	1970
5¾% Sinking Fund Debentures Series A, maturing on April 1, 1983	$33,400,000	$34,408,000
Less portion included in current liabilities	1,400,000	408,000
	$32,000,000	$34,000,000

The Company is required to make sinking fund payments for the retirement of the Sinking Fund Debentures in principal amounts as follows:

$2,000,000 on October 1 in each of the years 1972 to 1978; and

$2,500,000 on October 1 in each of the years 1979 to 1982.

At December 31, 1971 $600,000 principal amount had been purchased to meet the sinking fund requirements in 1972.

8. OWNERSHIP

Ownership was evidenced by:	1971	1970
Capital stock		
Authorized:		
489,000 First Preference Shares with a par value of $100 each, issuable in series		
15,000,000 Common Shares without par value		
Issued:		
139,000 $5.80 Cumulative Redeemable First Preference Shares Series A (142,575 at December 31, 1970) (redeemable at premiums ranging from 4½% to 1%)	$ 13,900,000	$ 14,257,500
12,249,584 Common Shares	72,437,504	72,437,504
	86,337,504	86,695,004
Contributed surplus	19,580,712	19,522,577
Retained earnings	73,843,456	69,861,840
Total	$179,761,672	$176,079,421

(i) During the year 3,575 First Preference Shares were purchased for cancellation, thereby satisfying the Company's 1971 obligation referred to in note 9 (iii) below.

(ii) At December 31, 1971, 99,600 Common Shares were reserved under a Stock Option Plan. Outstanding options have been granted to employees to purchase:

20,100 shares at a price of $24.64 per share on or before March 30, 1977; and

28,500 shares at a price of $28.35 per share on or before April 1, 1978 (options on 4,000 shares were extinguished during 1971).

(iii) There are restrictions on the payment of dividends in the provisions attaching to the Preference Shares and the Company's trust indenture relating to the Series A Debentures.

9. COMMITMENTS AND CONTINGENT LIABILITIES

The following commitments and contingent liabilities were outstanding at December 31, 1971:

(i) Estimated total cost to complete capital projects, including the Lisbon uranium mine in Utah, was approximately $8,872,000 (committed approximately $3,000,000);

(ii) Minimum annual rentals upon real property with original lease terms extending beyond December 31, 1974, amounted to approximately $570,000;

(iii) The Company is obligated on April 1 in each year to set aside $300,000 as a retirement fund, to be used to purchase or redeem Preference Shares;

(iv) The Company has agreed to incur on behalf of Lornex Mining Corporation Ltd. all defined construction period costs and those operating period costs incurred during the first four years following commencement of commercial production which is expected to occur in 1972. If Lornex is unable to reimburse the Company for any of the aforementioned costs the Company may elect to receive Units of Income Debentures and Class A shares of Lornex in lieu of reimbursement at a later date. The Company's obligation to incur further expenses is suspended if unreimbursed construction period costs exceed $20,000,000 or if unreimbursed costs in total exceed $30,000,000. The Company has already accepted 16,141 such Units comprising $16,141,000 principal amount of Income Debentures and 1,291,280 Class A shares, thereby reducing the limits on its potential liability to $3,859,000 and $13,859,000 respectively. Of the 16,141 Units accepted in 1971 27.5% or 4,439 were sold at cost to The Yukon Consolidated Gold Corporation Limited in accordance with a previous agreement; and

(v) The Anglo-Rouyn mine, in which the Company has a 58% interest, is expected to close in the third quarter of 1972. All of the capital assets will have been fully amortized by that time. Liquidation will proceed on an orderly basis.

10. REMUNERATION OF DIRECTORS AND SENIOR OFFICERS

During the year ended December 31, 1971 the aggregate direct remuneration paid or payable by the Company and its consolidated subsidiaries to the directors and senior officers of the Company was $603,434.

11. DEPRECIATION AND AMORTIZATION

This consists of the following provisions:

	1971	1970
Plant and equipment	$ 7,790,810	$ 7,091,830
Mining properties and preproduction expenditures	1,971,073	1,722,723
	9,761,883	8,814,553
Excess of acquisition cost over adjusted book value of assets acquired	1,047,100	1,047,100
	$10,808,983	$ 9,861,653

Comparative Consolidated Earnings by Operation

YEAR ENDED DECEMBER 31, 1971

($000's omitted)

	1971	1970
MINING		
Revenue from mine production	$ 46,857	$ 44,413
Expenses:		
Cost of production and administration	26,605	28,311
Depreciation and amortization	4,445	3,847
Exploration expenditures	2,385	2,006
Minority interest in profit (loss) of subsidiary	(414)	44
Total expenses	33,021	34,208
Net earnings from operations before taxes	13,836	10,205
STEEL		
Revenue from sales of steel and other products	121,172	139,112
Expenses:		
Cost of production, selling and administration	113,082	123,541
Depreciation	5,234	4,894
Amortization of excess of acquisition cost over adjusted book value of assets acquired	1,047	1,047
Minority interest in profit of subsidiary	3	3
Total expenses	119,366	129,485
Net earnings from operations before taxes	1,806	9,627
CORPORATE		
Expenses:		
Cost of administration	2,578	2,473
Interest	2,145	2,007
Amortization of discount and financing expenses	162	162
Depreciation	82	72
Total expenses	4,967	4,714
Less investment and other income	966	1,779
Net expense for the year	(4,001)	(2,935)
NET EARNINGS FROM OPERATIONS BEFORE PROVISION FOR TAXES	11,641	16,897
Provision for taxes:		
Provincial mining taxes	1,513	546
Income taxes	430	945
	1,943	1,491
NET EARNINGS FROM OPERATIONS	9,698	15,406
Deduct extraordinary items	—	1,330
NET EARNINGS FOR THE YEAR	$ 9,698	$ 14,076

Rio Algom Divisions and Affiliates

Canada

MINING

Head Office—Toronto, Ontario
New Quirke, Elliot Lake, Ont.
Anglo-Rouyn Mines Limited, La Ronge, Sask.
Mines de Poirier, Joutel, Quebec
Lornex Mining Corporation Ltd., Vancouver, B.C.,
Property at Ashcroft, B.C.

EXPLORATION

Rio Tinto Canadian Exploration Limited, (Riocanex)
Head Office—Toronto, Ontario
Branch Offices—Vancouver, B.C., Noranda, P.Q.

STEEL

Atlas Steels Company, Head Office—Welland, Ontario
Plants at Welland, Ontario and Tracy, Quebec

METAL DISTRIBUTION

Atlas Alloys, Head Office—Toronto, Ontario
Service Centres at Toronto, Etobicoke, Winnipeg, Montreal, Windsor, Edmonton, Vancouver

United States

MINING

Rio Algom Corporation, Wilmington, Delaware
Property at Moab, Utah

EXPLORATION

Rioamex, Division of Atlas Alloys Inc., Cleveland, Ohio and Denver, Col.

METAL DISTRIBUTION

Atlas Alloys Inc., Head Office—Cleveland, Ohio
Service Centres at Cleveland, Ohio and Detroit, Mich.

Overseas

METAL DISTRIBUTION

Atlas Steels (England) Limited, Luton, England
Atlas Steels (Australia) Pty. Limited, Melbourne, Australia
Atlas Steels S.A., Lausanne, Switzerland
Aceromex-Atlas S.A., Mexico City, Mexico
Agents or Distributors in other countries

Principal Associates

Canada	Brinco Limited Churchill Falls (Labrador) Corporation Limited One Westmount Square, Montreal, Quebec Indal Canada Limited 52 Arrow Road, Weston, Ontario
United Kingdom	The Rio Tinto-Zinc Corporation Limited Anglesey Aluminium Limited R.T.Z. Britain Limited R.T.Z. Pillar Limited 6 St. James's Square, London, S.W.1 Y 4LD Capper Pass & Son Limited Melton Works, North Ferriby, Yorkshire Borax (Holdings) Limited Borax House, Carlisle Place, London, S.W.1 P 1HT
Commonwealth of Australia	Conzinc Riotinto of Australia Limited The Zinc Corporation Limited N.B.H.C. Holdings Limited Australian Mining & Smelting Company Limited Queensland Alumina Limited The Broken Hill Associated Smelters Pty. Limited Sulphide Corporation Pty. Limited Comalco Limited Hamersley Iron Pty. Limited Mary Kathleen Uranium Ltd. Bougainville Mining Limited 95 Collins Street, Melbourne, 3000, Victoria
Republic of South Africa	Rio Tinto Holdings Limited Palabora Mining Company Limited 70 Marshall Street, Johannesburg
United States of America	Rio Tinto-Zinc Corporation of America The Pyrites Company, Inc. P.O. Box 1188, Christina Avenue Wilmington, Delaware 19899 Alloys and Chemicals Corporation 4365 Bradley Road, South West Cleveland 9, Ohio 44109 Ireco Chemicals Suite 726, Kennecott Bldg., East South Temple Street, Salt Lake City, Utah 84111 United States Borax & Chemical Corporation 3075 Wilshire Boulevard, Los Angeles California 90005
Spain	Union Explosivos Rio Tinto S.A. Paseo De La Castellana, 20 Madrid 1
Japan	Rio Tinto-Zinc (Japan) Limited Shin Tokyo Building, 23-Chome Marunouchi, Chiyoda-Ku, Tokyo 100

Miscellaneous Corporate Information

Head Office	120 Adelaide St. West, Toronto 1, Ontario, Canada
Principal Bankers	Canadian Imperial Bank of Commerce, Toronto The Toronto-Dominion Bank, Toronto First National City Bank, New York
Solicitors	Fasken & Calvin, Toronto Fried, Frank, Harris, Shriver and Jacobson, New York
Auditors	Coopers & Lybrand, Chartered Accountants, Toronto
Registrars and Transfer Agents	Common Shares Canada Permanent Trust Company, Toronto, Montreal, Winnipeg, Calgary and Vancouver The Canadian Bank of Commerce Trust Company, New York Preference Shares Canada Permanent Trust Company, Toronto, Montreal, Halifax, Winnipeg and Vancouver
Shares Listed	Toronto Stock Exchange, Toronto Montreal Stock Exchange, Montreal American Stock Exchange, New York

Printed in Canada.

Rio Algom

Rio Tinto

Rio Algom Mines Limited

Interim Report to the Shareholders

for the six months ended June 30, 1971

TO THE SHAREHOLDERS:

Net earnings for the first six months of 1971 were $5,129,000 as compared with $8,764,000 for the similar period in 1970. The comparative net earnings per common share were 39¢ and 68¢ respectively. Sales totalled $85,521,000, about 10% lower than in the 1970 period.

The decline in demand for specialty steel products which began in the fourth quarter of 1970 continued in the first half of 1971 and consequently earnings from steel operations were considerably lower in the first half of 1971 compared to the 1970 period. The depressed demand for specialty steel in both domestic and export markets has combined with extreme pressure from foreign competitors to cause a deterioration in the specialty steel market in terms of both price and volume in a period when labour and material costs continue to escalate. Further, the increased value of the Canadian dollar in relation to foreign currencies affected revenues and earnings adversely to a greater extent in the first half of 1971. Improvement will depend largely on the timing and rate of improvement in those industries which the steel operations serve; an upturn has not yet begun.

Earnings from mining operations in total increased over the comparable period in 1970. Uranium profits were higher, but the increase was largely offset by substantially lower copper prices. The increased uranium profits were largely due to increased production resulting from an increase in tons milled and a larger proportion of ore coming from the higher-grade New Quirke mine. Copper production increased slightly over 1970, with higher grades at the Poirier mine being more than sufficient to offset a drop in production at Anglo-Rouyn and the shutdown of the Pronto mine in April, 1970.

As previously reported, the earnings from the Poirier mine were not taxed as those of a separate company after February 28, 1970 and this is the main reason for the decrease of $1,268,000 in provision for income taxes including provincial mining taxes.

At the Utah uranium mine, underground development is now proceeding normally from both the ventilation and production shafts and the water problem encountered in February appears to be fully controlled. Surface construction is continuing slightly ahead of schedule. The main ore bin has been completed, the head frame has been closed in and the hoist is being installed.

Despite unusually severe winter weather and spring break-up conditions, the Lornex project is substantially on schedule in relation to the planned commencement of production in the second quarter of 1972. Approximately 40% of the currently estimated 47 million tons of preproduction material has been removed from the open pit. The various process and ancillary facilities are on schedule at various stages of construction. The major portion of the concrete work has been completed, steel erection is well under way and some sections of heavy equipment have been set into place. The first group of 100 houses at the Logan Lake townsite is nearing completion with occupancy expected to begin in August. Work is under way on the second phase of the program comprising 58 dwelling units and satisfactory progress is being made on the commercial and civic centre and the elementary school which is planned to be available for the start of the school year. As of June 30, 1971 expenditures and commitments on the Lornex project amounted to approximately $75 million.

As previously reported, the Lornex project capital cost is expected to be $138 million compared with the $123.6 million originally estimated when the decision was made in 1969 to proceed with the project and upon which the financing arrangements were made. On June 25, 1971, the first issue of Units of 8½% Series A Income Debentures and Class A shares was made to Rio Algom Mines Limited in accordance with Rio Algom's obligation (pursuant to the Construction and Management Agreement) to provide supplementary financing to Lornex. Units comprising $1,519,000 in principal amount of Debentures and 121,520 Class A shares were issued. In accordance with a previous agreement between Rio Algom and The Yukon Consolidated Gold Corporation Limited, the Company sold 27.5% of the Units to Yukon. Therefore, the Company's net investment in Units was $1,101,000 principal amount of Income Debentures and 88,080 Class A shares, of which 33,440 shares were converted to common shares.

Toronto, Canada R. D. ARMSTRONG
July 29, 1971 *President*

Subject to year-end audit and adjustments.

RIO ALGOM MINES LIMITED
CONSOLIDATED STATEMENT OF EARNINGS

for the six months ended June 30, 1971
($000's omitted)

	1971	*1970*
Revenue from mine production and sales of steel and other products	$85,521	$95,420
Investment and other income	310	1,109
	85,831	96,529
Deduct:		
Cost of production, purchased products, selling and administrative expenses	72,310	78,250
Interest and amortization of discount and financing expenses	1,106	1,127
Depreciation and amortization	5,257	5,156
Exploration expenditures	1,274	894
	79,947	85,427
	5,884	11,102
Provision for income taxes including Provincial mining taxes	861	2,129
	5,023	8,973
Minority interest in profits (losses) of subsidiaries	(106)	209
Net earnings for the period	**$ 5,129**	**$ 8,764**
Preference dividends	$ 412	$ 416
Net earnings per common share	**39¢**	**68¢**

The net earnings per common share are calculated after providing for dividends on first preference shares and are based on the average number of common shares outstanding during the respective periods.

RIO ALGOM MINES LIMITED
CONSOLIDATED STATEMENT OF SOURCE AND DISPOSITION OF FUNDS

for the six months ended June 30, 1971
($000's omitted)

	1971	*1970*
Source of funds:		
Net earnings for the period	$ 5,129	$ 8,764
Add depreciation, amortization and other charges (net) to operations not involving current outlay of funds	5,296	5,837
	10,425	14,601
Disposition of funds:		
Expenditures (net) for fixed assets and preproduction	4,492	3,949
Investment in associated companies (net)	1,101	—
Increase in development projects	—	3,600
Dividends on preference shares	412	416
Dividends on common shares	2,450	2,450
Reduction of long term advances	—	600
Reduction of long term debt	—	1,592
Purchase of preference shares for cancellation	137	331
	8,592	12,938
Increase in working capital	**$ 1,833**	**$ 1,663**

AR10